

I Claim:

1. A cooling system for an engine comprising:  
an electronically controlled actuator responsive to a  
control signal;

5 an airflow adjusting mechanism coupled to said actuator  
that adjusts airflow in the engine due to action of said  
actuator;

a coolant adjusting mechanism coupled to said actuator that  
adjusts coolant flow through the engine due to action of said  
10 actuator; and

a controller for generating said signal based on an engine  
operating condition.

2. The system of claim 1, wherein said electronically  
15 controlled actuator is a hydraulic actuator.

3. The system of claim 1, wherein said electronically  
controlled actuator is a pneumatic actuator.

20 4. The system of claim 1, wherein said electronically  
controlled actuator is an electro-mechanical actuator.

5. The system of claim 1, wherein said electronically  
controlled actuator is an electro-magneto-mechanical actuator.

6. The system of claim 1, wherein said airflow adjusting mechanism is a variable speed fan.

5 7. The system of claim 1, wherein said airflow adjusting mechanism is a variable pitch blade fan.

8. The system of claim 1, wherein said coolant adjusting mechanism is a variable speed pump.

10 9. The system of claim 1, wherein said coolant adjusting mechanism is a fixed-speed pump having an adjustable by-pass valve.

15 10. The system of claim 1, wherein said coolant adjusting mechanism is a variable displacement pump.

11. The system of claim 1, wherein said engine operating condition includes at least engine speed.

20 12. The system of claim 1, wherein said engine operating condition includes at least engine coolant temperature.

13. A cooling system for an engine comprising:

an electronically controlled actuator adapted to receive an electrical control signal that varies with operation of the engine;

5 a fan mechanically coupled to said actuator, said fan adjusted by said actuator; and

a coolant adjusting mechanism mechanically coupled to said actuator, said mechanism adjusted by said actuator.

10 14. The system of claim 13, wherein said coolant adjusting mechanism is a variable speed pump.

15 15. The system of claim 13, wherein said coolant adjusting mechanism is a fixed-speed pump having an adjustable by-pass valve.

16. The system of claim 13, wherein said coolant adjusting mechanism is a variable displacement pump.

20 17. The system of claim 13, wherein said fan is mechanically coupled to said actuator via a shaft.

18. The system of claim 13, wherein said fan is mechanically coupled to said actuator via a pulley.

19. The system of claim 13, wherein said fan is mechanically coupled to said actuator via a clutch.

5 20. The system of claim 13, wherein said mechanism is mechanically coupled to said actuator via a shaft.

21. The system of claim 13, wherein said mechanism is mechanically coupled to said actuator via a pulley.

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22. The system of claim 13, wherein said mechanism is mechanically coupled to said actuator via a clutch.